

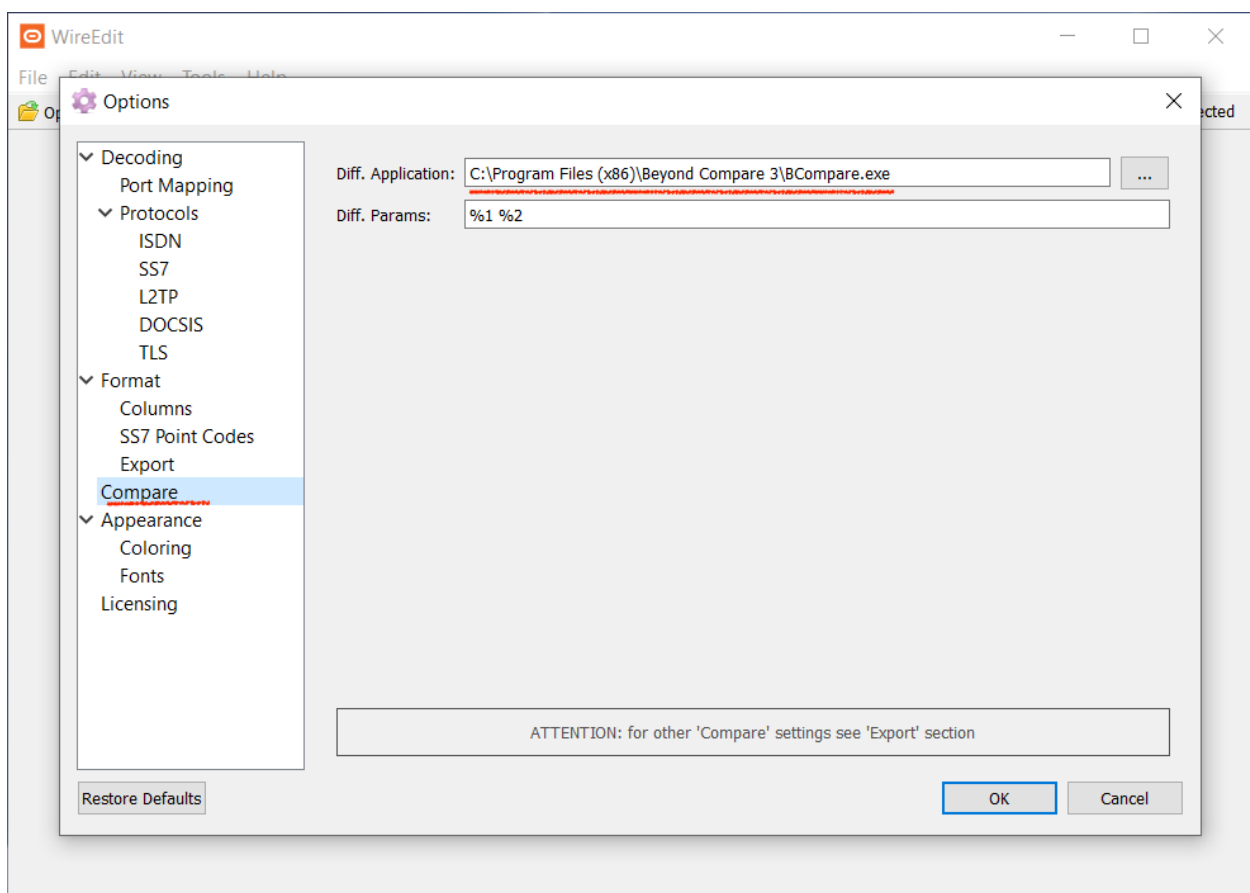
WireEdit + Beyond Compare for Win10

12/24/2019

WireEdit and Beyond Compare allows visual side-by-side packet compare. One can compare selected packets from the same or different pcap files. The steps to enable this functionality for Win10 are listed below. One could set up WireEdit OSX and WireEdit Linux to work with Beyond Compare in the similar way.

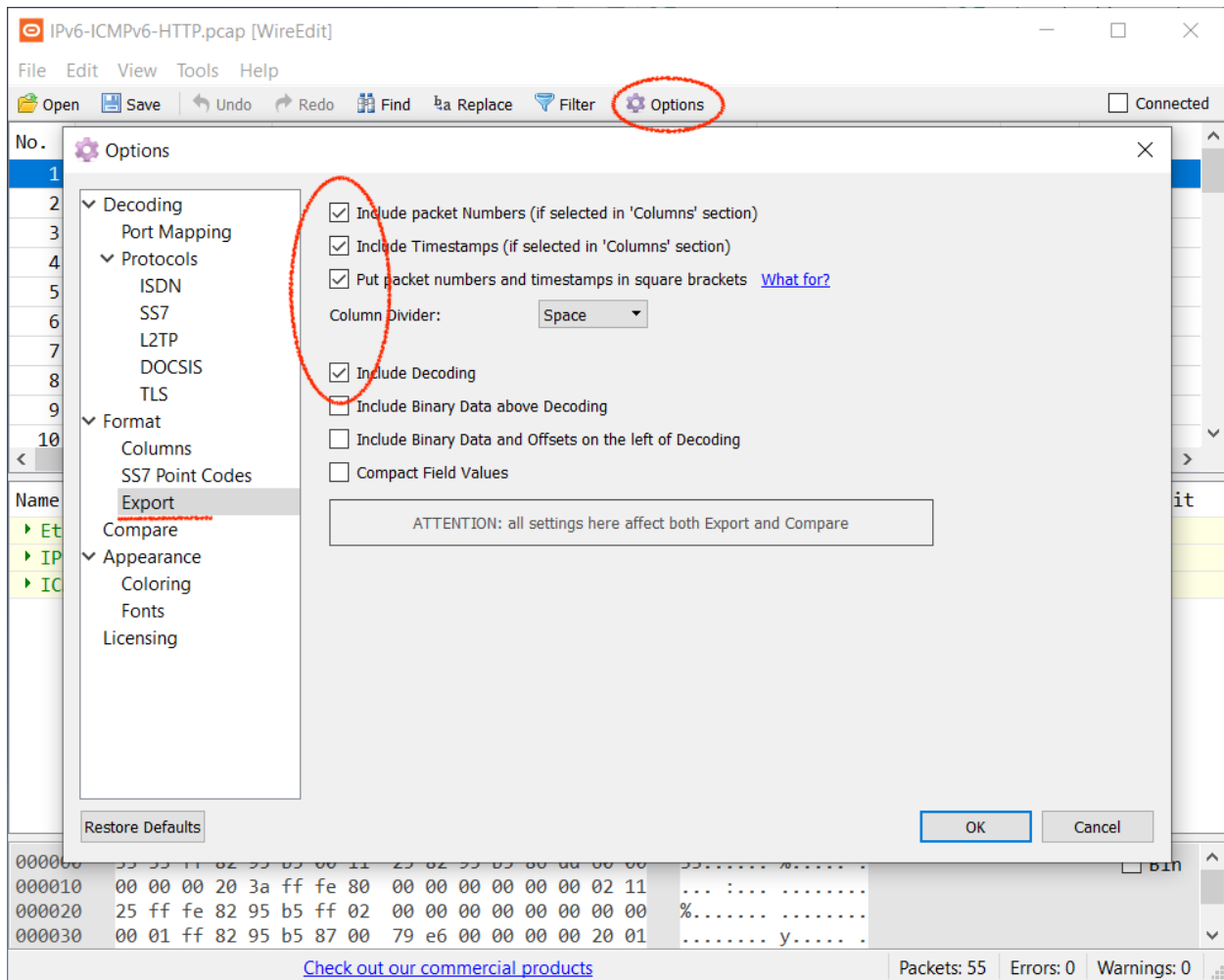
Step 1

- a) Install Beyond Compare (<https://www.scootersoftware.com>).
- b) Install WireEdit 2.11 or later and launch it.
- c) Select Options icon at toolbar.
- d) In the left panel select Compare.
- e) Select the path to Beyond Compare in Diff. Application on the right.



Step 2

- Select Export in the left panel
- Select the top four checkboxes on the right.



Step 3

Open a pcap file and select packets to be compared. Select a packet as shown below, then select Set as Target to Compare from the context menu.

The screenshot shows the Wireshark interface with the file 'IPv6-ICMPv6-HTTP.pcap [WireEdit]'. The packet list pane displays several packets, with packet 1 selected. A context menu is open over packet 1, showing options like Cut, Copy, Copy Headers, Copy Decoding, Paste, Hide Selected, Hide All But Selected, Show hidden packets, Delete Selected, Delete All But Selected, Edit Time..., Time Reference, Edit Comment..., **Set as Target to Compare** (highlighted with a red circle), and Compare to Target. The packet details pane shows the selected packet's structure: Ethernet II, IPv6, and ICMPv6: Neighbor Solicitation. The packet bytes pane shows the raw data in hexadecimal and ASCII.

No.	Relative Time	Source	Destination	Length	Layers
1	00:00:00.000000	fe80::211:25ff:fe82:...	ff82:95b5	86	ICMPv6
2	00:00:00.999613	fe80::211:25ff:fe82:...	ff82:95b5	86	ICMPv6
3	00:00:01.999505	fe80::211:25ff:fe82:...	ff82:95b5	86	ICMPv6
4	00:00:18.895689	fe80::2d0:9ff:fee3:...	...	90	ICMPv6
5	00:00:19.315577	:::	ff98:6e1	78	ICMPv6
6	00:00:20.446065	[2001:6f8:102d:0:103:...	fb]:5353	211	UDP
7	00:00:20.447313	[2001:6f8:102d:0:103:...	fb]:5353	192	UDP
8	00:00:20.705918	[2001:6f8:102d:0:103:...	fb]:5353	211	UDP
9	00:00:20.955903	[2001:6f8:102d:0:103:...	fb]:5353	211	UDP
10	00:00:20.957151	[2001:6f8:102d:0:103:...	fb]:5353	192	UDP
11	00:00:21.156538	[2001:6f8:102d:0:103:...	fb]:5353	192	UDP

Name	Value
▶ Ethernet II	
▶ IPv6	
▶ ICMPv6: Neighbor Solicitation	

Offset	Hex	ASCII
000000	33 33 ff 82 95 b5 00 11 25 82 95 b5 86 dd 60 00	33..... %.....`
000010	00 00 00 20 3a ff fe 80 00 00 00 00 00 02 11	... :...
000020	25 ff fe 82 95 b5 ff 02 00 00 00 00 00 00 00	%.....
000030	00 01 ff 82 95 b5 87 00 79 e6 00 00 00 00 20 01 y.....

Check out our commercial products

Packets: 55 Errors: 0 Warnings: 0

Step 4

Select the second one, then select Compare to Target from the context menu. Alternatively you could open another pcap file and select the second packet from there. **One could select multiple packets at each step.**

The screenshot shows the WireEdit application window titled "IPv6-ICMPv6-HTTP.pcap [WireEdit]". The menu bar includes File, Edit, View, Tools, and Help. The toolbar contains icons for Open, Save, Undo, Redo, Find, Replace, Filter, and Options, along with a "Connected" checkbox. The main packet list table has columns: No., Relative Time, Source, Destination, Length, and Layers. Packet 3 is selected, and a context menu is open over it. The menu options are: Cut (Ctrl+X), Copy (Ctrl+C), Copy Headers, Copy Decoding, Paste (Ctrl+V), Hide Selected, Hide All But Selected, Show hidden packets, Delete Selected (Del), Delete All But Selected, Edit Time..., Time Reference, Edit Comment..., Set as Target to Compare, and Compare to Target (highlighted with a red circle). The packet list shows packets 2 through 13. Packet 3 has a relative time of 00:00:01.999505, source fe80::211:25ff:fe82:95b5, destination ff02::1:ff82:95b5, length 86, and layer ICMPv6. The bottom pane shows the raw packet data in hexadecimal and ASCII. The status bar at the bottom indicates "Packets: 55", "Errors: 0", and "Warnings: 0".

No.	Relative Time	Source	Destination	Length	Layers
2	00:00:00.999613	fe80::211:25ff:fe82:95b5	ff02::1:ff82:95b5	86	ICMPv6
3	00:00:01.999505	fe80::211:25ff:fe82:95b5	ff02::1:ff82:95b5	86	ICMPv6
4	00:00:18.895689	fe80::211:25ff:fe82:95b5	ff02::16	90	ICMPv6
5	00:00:19.315577	::	ff02::1:ff98:6e1	78	ICMPv6
6	00:00:20.446065	[2001::]	[ff02::fb]:5353	211	UDP
7	00:00:20.447313	[2001::]	[ff02::fb]:5353	192	UDP
8	00:00:20.705918	[2001::]	[ff02::fb]:5353	211	UDP
9	00:00:20.955903	[2001::]	[ff02::fb]:5353	211	UDP
10	00:00:20.957151	[2001::]	[ff02::fb]:5353	192	UDP
11	00:00:21.156538	[2001::]	[ff02::fb]:5353	199	UDP
12	00:00:21.226685	[2001::]	[ff02::fb]:5353	203	UDP
13	00:00:21.226685	[2001::]	[ff02::fb]:5353	203	UDP

Raw packet data (hex/ascii):

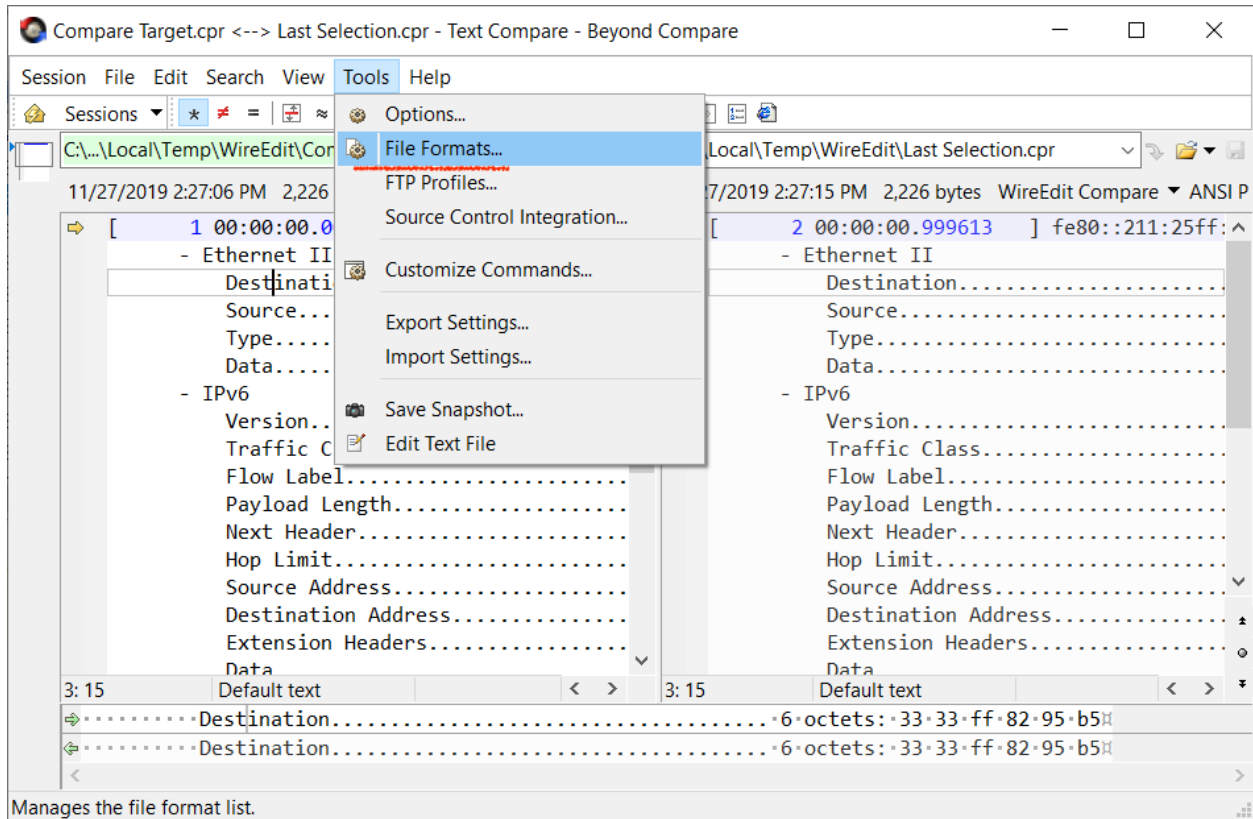
```
000000 33 33 ff 82 95 b5 00 11 25 82 95 b5 86 dd 60 00 33.....%....`
000010 00 00 00 20 3a ff fe 80 00 00 00 00 00 02 11 ... :..
000020 25 ff fe 82 95 b5 ff 02 00 00 00 00 00 00 00 %.....
000030 00 01 ff 82 95 b5 87 00 79 e6 00 00 00 00 20 01 .....y....
```

Check out our commercial products

Packets: 55 Errors: 0 Warnings: 0

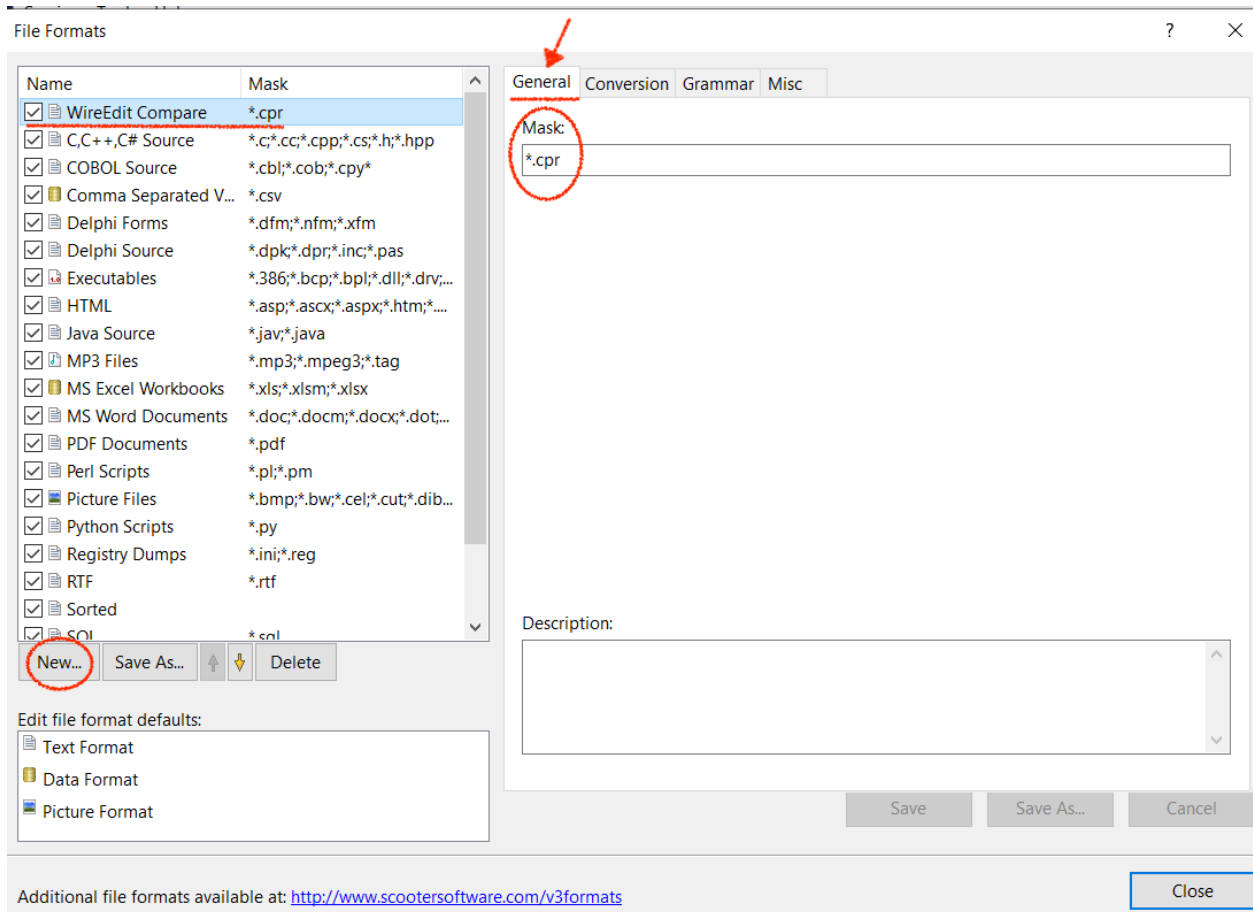
Step 5

- a) Beyond Compare should start at this point. If not, go back to Step 1.
- b) Select File Format from Tools top menu.



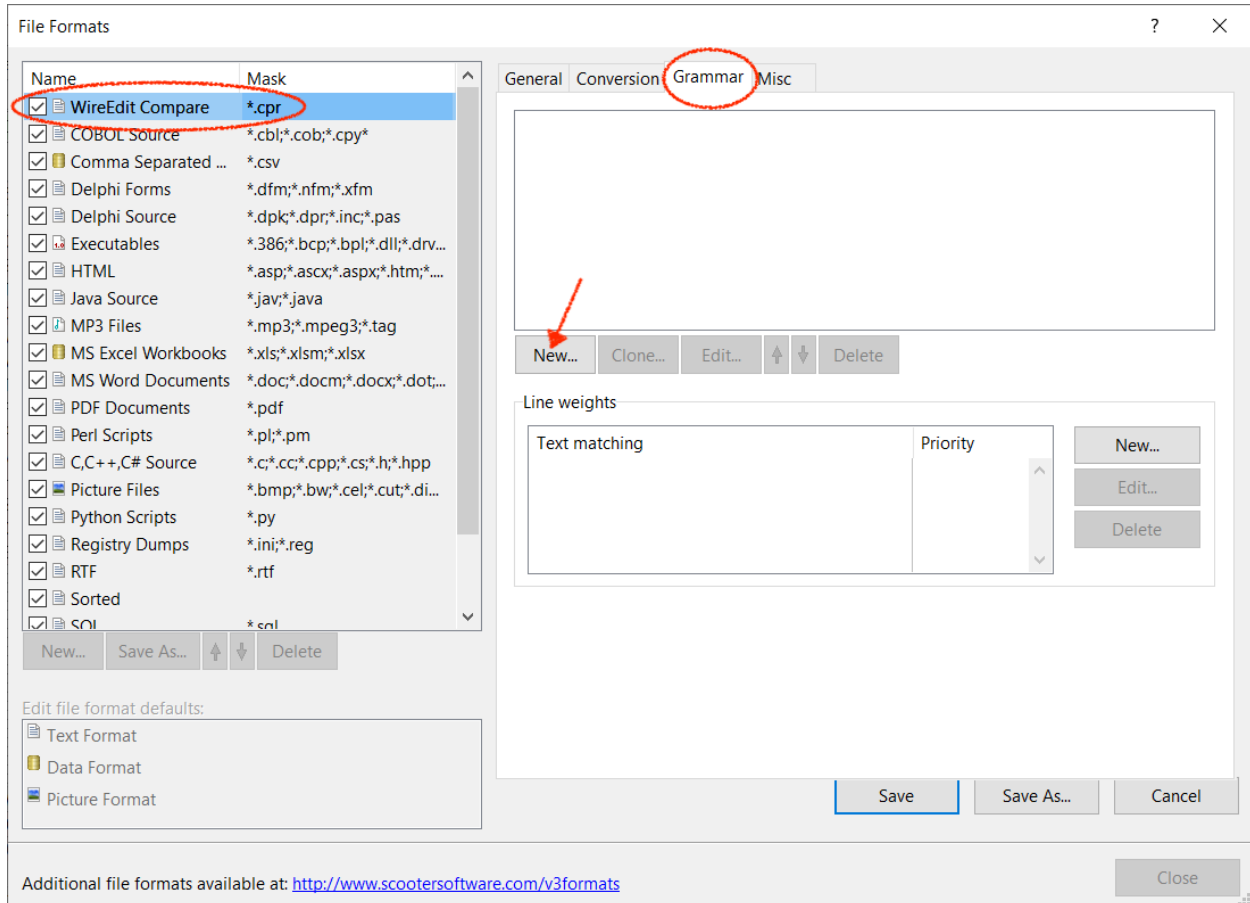
Step 6

- Create a new file format entry by clicking New at the bottom left.
- Select Text Format.
- Name it **“WireEdit Compare”**.
- Enter the extension mask ***.cpr** as mask at General tab page.



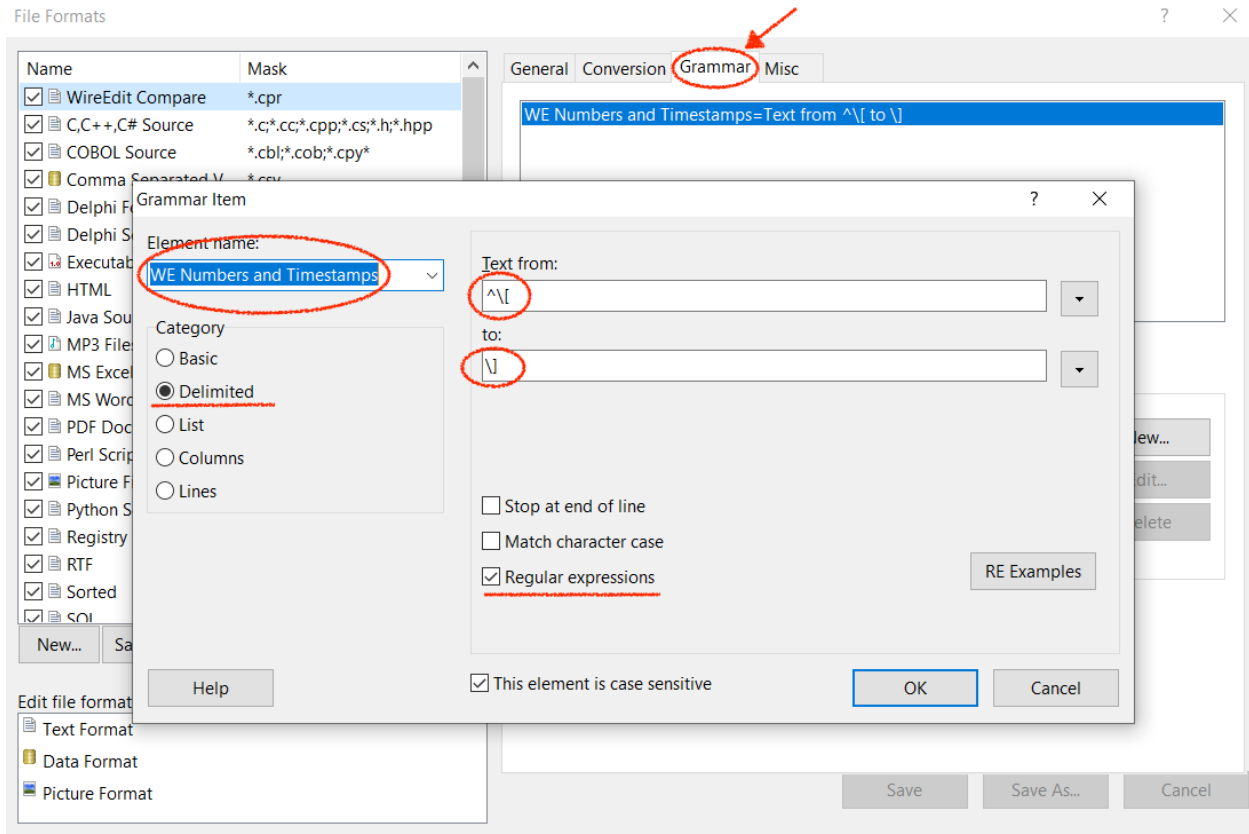
Step 7

Select Grammar tab. Click New on the right as shown.



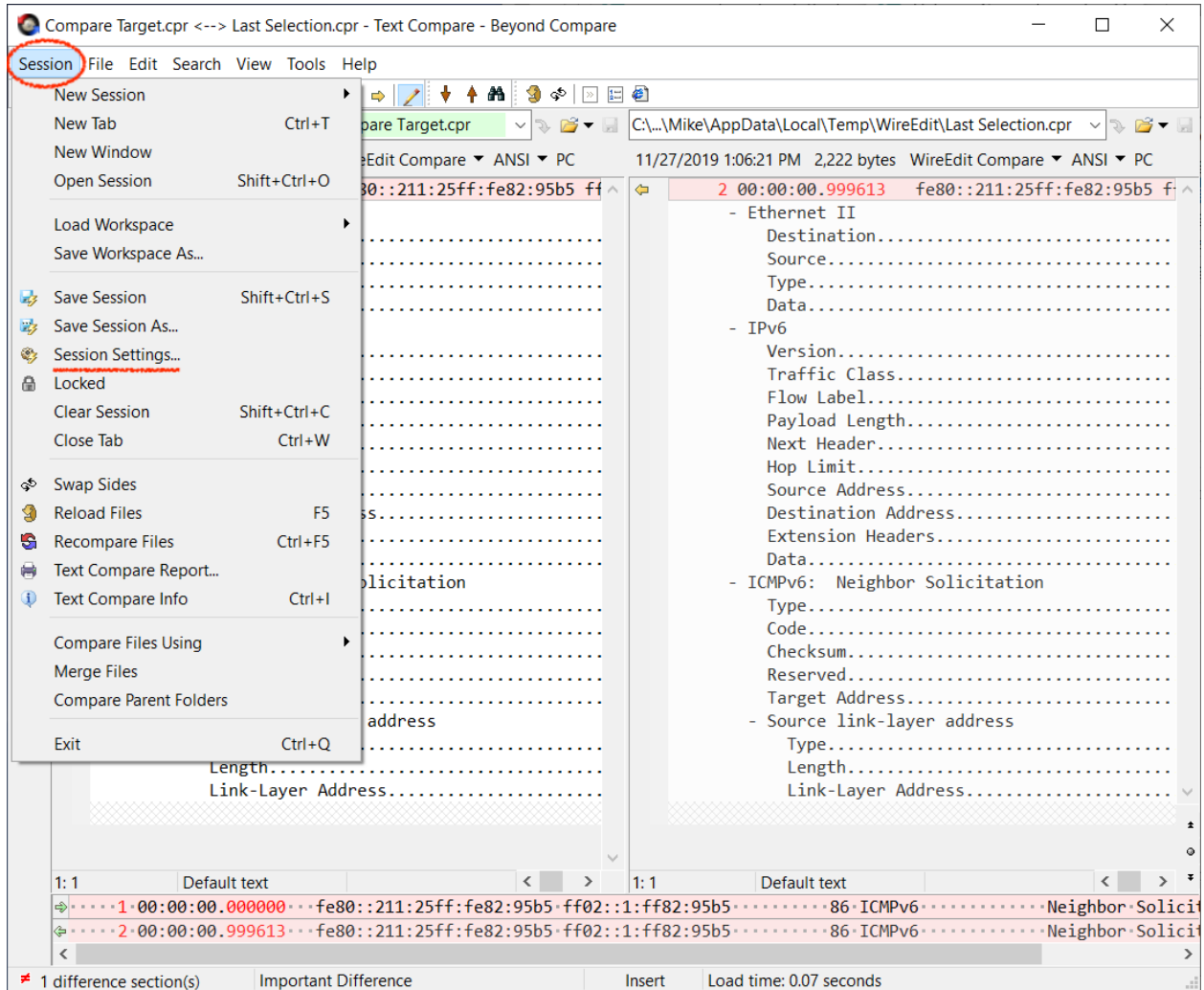
Step 8

- Enter **“WE Numbers and Timestamps”** in “Element Name”.
- Select Delimited in “Category” list below.
- Enter **^** in “Text from:” field.
- Enter **** in “to:” field.
- Select Regular expressions below.



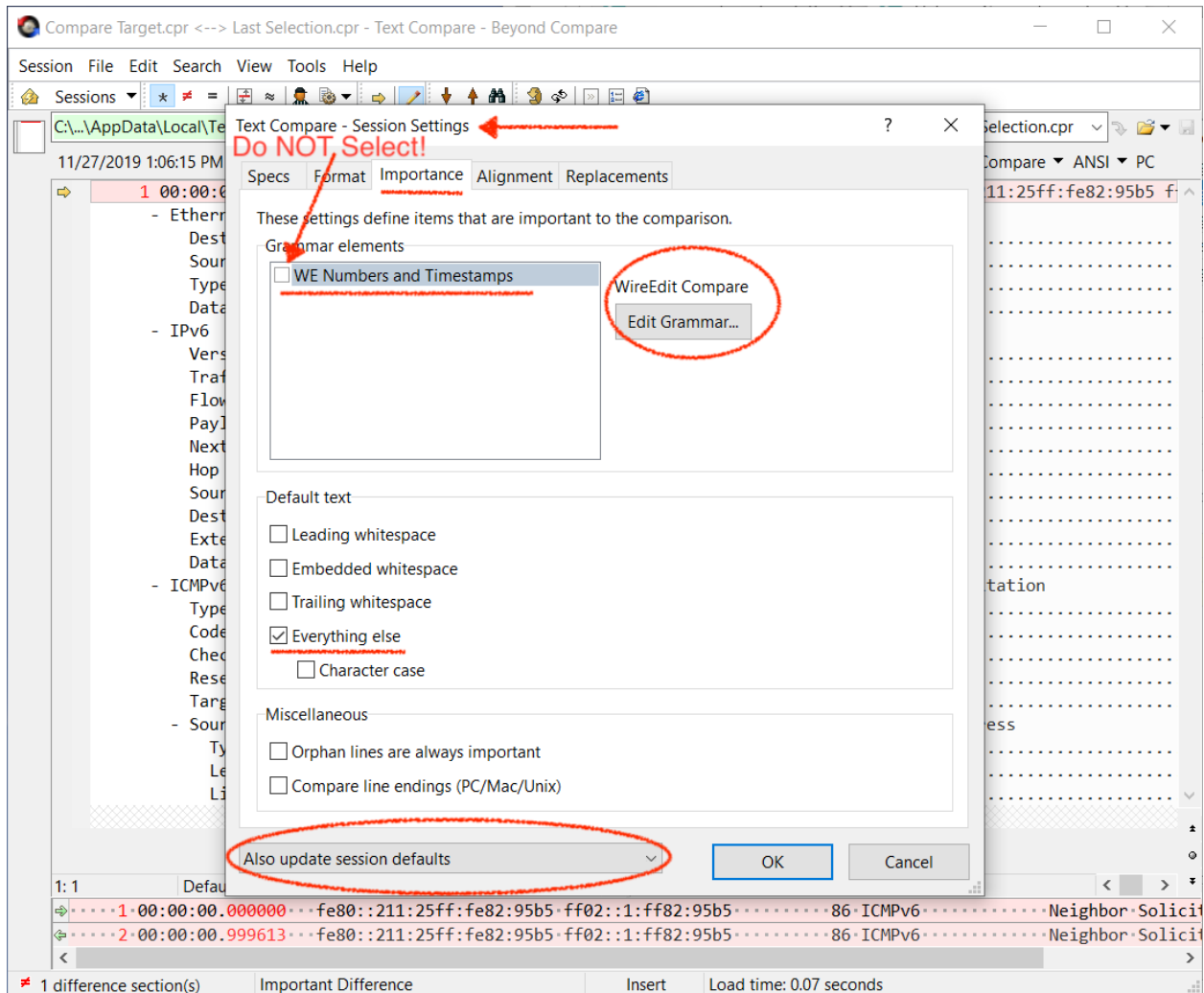
Step 9

Select Session Settings... from Session menu.



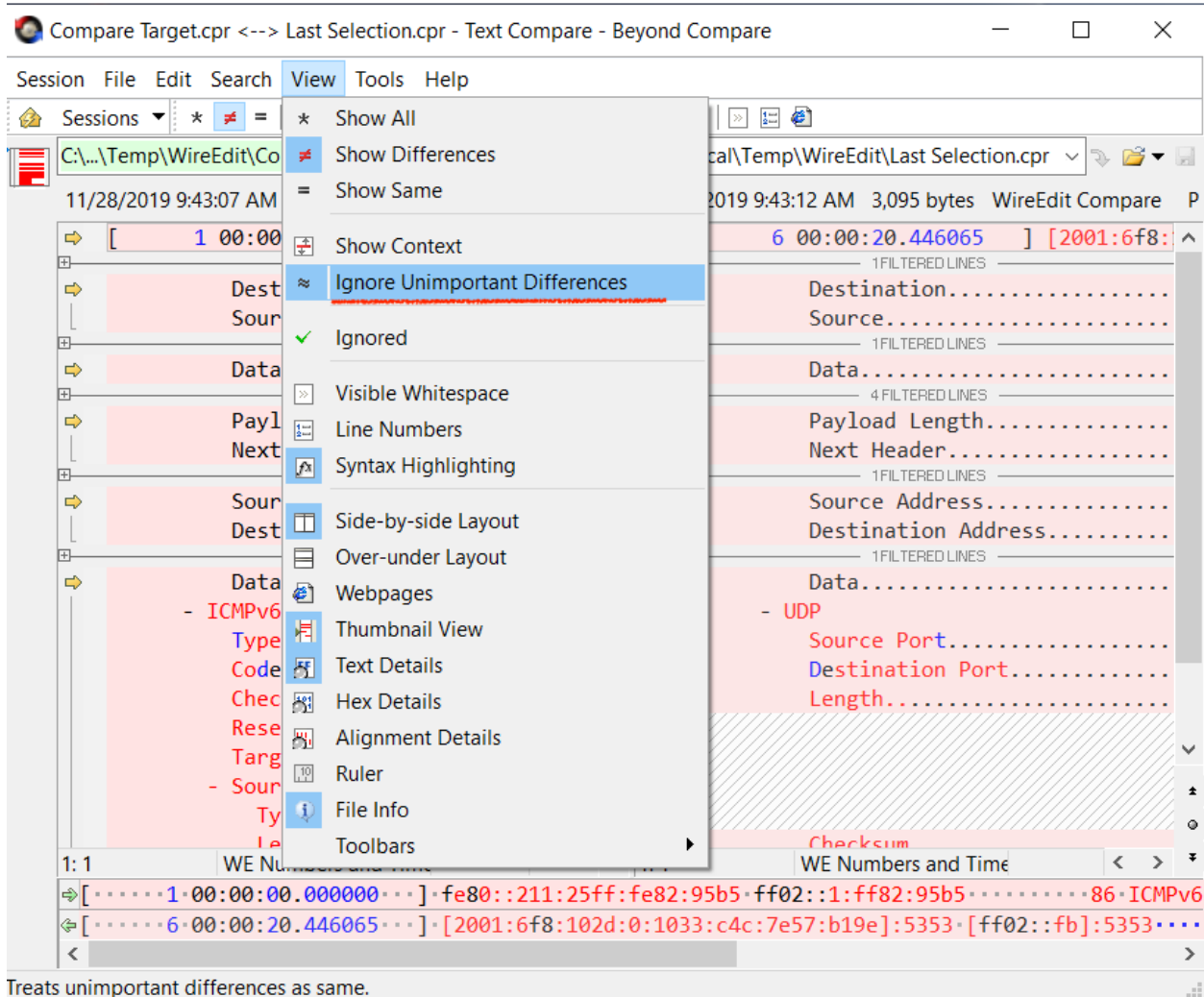
Step 10

- Select Importance tab. See “WE Numbers and Timestamps” in “Grammar Elements” list.
- Clear** the checkbox on the left.
- Select Everything else checkbox.
- Select Auto update session defaults at the bottom.



Step 11

Select Ignore Unimportant Differences in View menu



You are good to go. Select the range of packets, then select Set as Target to Compare from the context menu. Select another range of packets in the same or different file, then select Compare to Target from the context menu.